

needed further development and refinement. Regardless of compliance requirements, universities should recognise that such practices are important components of good management in any contemporary organisation. In any case, a failure to acknowledge such obligations will assuredly lead to a much more systematic focus on our operations, not only by the agencies of executive government, but also by public watchdogs such as anti-corruption agencies and auditors-general. The recent report of the WA Auditor-General relating to the compliance by university staff in that State with relevant university policy in respect of consultancy activities and rights of private practice is but the most obvious current example.

A focus on improving budget and financial management will affect universities not only in global terms. It may also involve, at a detailed level, a careful assessment of the way in which resources are allocated for teaching and research activities. That may be very difficult for the system to accept, but overseas experience suggests that we should prepare ourselves for such debates. For example, the way in which information technology and communications are transforming the teaching and learning environment, together with the pressures for massification of the student population and the requirement to manage with less resources, will lead collectively to the identification or reformulation of the various performance measures that are in use. For example, over recent years much stronger emphasis has been placed on indicators such as graduation and progression rates, building occupancy rates, research output measures, and productivity measures for staff. On the other hand, in the future much less emphasis is likely to be placed on the importance of staff: student ratios in our academic planning. It may well be that staff: student ratios will, in the future, be examined alongside the costs of offering course units.

Experience to date with relative funding models suggests that the prospect of moving in such a direction might not be welcomed, and undoubtedly regarded as another example of managerialism encroaching into the sector. But it also might provide a very useful guide in terms of the consumption of resources as between undergraduate and postgraduate teaching.

A systematic focus on identifying better ways of allocating resources and planning future needs could also lead to more serious attempts to share resources across institutions. While the difficulties of such resource-sharing are acknowledged, the frequent unwillingness of institutions to grapple with this challenge is, perhaps, surprising. Probably the most obvious case in point, and one which bears directly on students and the overall quality of the learning environment, is the reluctance by many universities to cooperate with other institutions in terms of their library collections.

This reluctance to cooperate derives in part from the competitive environment which is being encouraged. In turn, this raises the issue of the relevance of market competition in an environment where the government has an interest in seeing strategic collaboration and economy in the use of system-wide resources.

A systematic focus on resource allocation is also likely to lead more institutions to seriously analyse the possibilities of contracting-out certain of those services currently operated internally. In terms of this issue, however, the mixed experience of the broader public sector needs to be carefully considered.

Asset management and risk assessment

A particular area for concern for universities as they seek to adopt better practices is that of risk management. Since the amalgamations of the last decade some universities have experienced a quantum leap in their asset values. Usually, a series of steps are designed to protect an organisation from unnecessary costs and losses. The management of 'risk' thus should be a vital activity in any organisation. Substantial losses including inefficiencies can be incurred if adequate systems are not established to identify risk and its impact. In this regard annual system appraisals may be used to assess the current level of exposure to risks. The financial standards applicable to universities in most states now require an analysis of the control environment, including an assessment as to whether the controls limit the risk to a level that is

acceptable to management. This involves the achievement of a careful balance as between the cost of the control and the risk it mitigates.

The regulatory framework

There is also little doubt that, if governments are serious about universities operating efficiently and effectively in both domestic and international contexts, serious attention should be devoted to the complex regulatory machinery presently governing university operations.

While universities operate under their own State Acts of Parliament, the Commonwealth is in a far stronger position to enforce compliance because of its control of the funding arrangements. The Commonwealth's interest in developing performance-based funding arrangements had been signalled over some years, although the adoption of real performance targets and measures in the system is essentially limited to the broad participation targets set in the profiles process, and real funding sanctions have generally been avoided. Commonwealth grant payments are now made direct to educational institutions rather than via the States. Consistent with this funding approach, universities themselves are responsible, rather than the States, for compliance with Commonwealth grant payments. However, the Commonwealth has generally left the determination of financial management standards and policies to state governments. Commonwealth-level accountability requirements have emphasised educational data collection and financial statement reporting (e.g., through education profile submissions) with little emphasis on establishing the standards for results-oriented management of universities. For example, as a condition of receipt of grants from the Commonwealth, universities present audited financial statements. But there is no requirement for the inclusion of non-financial performance information.

Universities in all states are now specifically covered by state government financial standards designed to improve financial management practices and accountability. Such requirements cover a range of areas including program management, asset management, position assessments and system appraisals (including cost effectiveness of internal controls and risk assessment) as well as the requirements for annual reporting and financial statements.

Conclusion

There may still be some resentment from within the sector about the trend in universities towards adopting contemporary management practices from the broader public sector. This is understandable. At the end of the day, however, universities must recognise that they are publicly-funded organisations which attract a hefty level of taxpayer benefaction and, like all other such supported organisations, they are being required to perform better and be more accountable for their activities.

Given that this trend has no prospect of being reversed, the issue for universities is not whether to accept or decline to contemporise their policies and practices, but to identify those elements of the public sector reform agenda which genuinely underpin improved operating efficiencies, and which advance the system towards its core goals, and to demonstrate convincingly to government the nature of this relationship. To that extent the sector itself has an obligation not merely to accept in a resigned way the machinery being imposed by governments on universities classified as part of a more broadly defined public sector, but to recommend the way in which such machinery may be shaped in its operation within universities so that tangible improvements occur in the way in which universities discharge their teaching, research and service obligations.

Decision-making in higher education: A comparative perspective

Harry de Boer and Leo Goedebuure

University of Twente, the Netherlands

Introduction

In many countries the manner in which higher education institutions are governed and the way in which internal decision-making processes and procedures operate are under discussion. To give but a few of the many examples, in Australia the government has initiated a system-wide review of institutional management, recently in Denmark the governance structure of institutions has been changed, in Ireland a review of management processes and structure is underway, in the Netherlands governance and management are key issues in the ongoing debate about restructuring higher education, and in Germany management issues feature in the discussion about the future direction of the system. This renewed interest in the governance and management of higher education is due to several factors.

First, it can be seen as a 'logical' component of a trend set in motion in the mid 1980s that emphasises a more market-like approach to the steering and control of higher education systems. For various reasons, governments the world over have made more or less far-reaching attempts to introduce more market-related approaches into their higher education systems, the most prominent being the allocation of part of the overall resources on the basis of competition and attempts to increase consumerism by, amongst others, increasing the user-pay element. Without going into the details of this development (see Goedebuure *et al.*, 1994 for a thorough discussion), the increased emphasis on managerialism and business-like structures is in line with the broad philosophy of the market-like approach.

Second, it can be seen also as a 'logical' consequence of an increased emphasis on institutional autonomy. In line with the notions of remote government control, self-regulatory systems, and a model of governmental supervision instead of stringent planning and control (see Neave & Van Vught, 1991), higher education institutions in many countries have experienced - sometimes profound - changes in their traditional relationships with national governments. Whether or not institutional autonomy actually has increased as a result of these changes remains a moot point, but it is without doubt that the demand for institutional accountability, especially in terms of the primary processes of teaching and research, has increased. Recently, the demand for accountability has stretched into the realm of management and governance.

Third, and closely related to the previous point, is the trend towards increased accountability in terms of value-for-money. With massive increases in higher education participation over the last decade and with diminishing resources available to the sector, efficiency questions are high on the political agenda the world over. And while initially the efficiency movement focused on increasing research productivity and a streamlining of the educational process in order to reduce the time-to-degree, more recently it has entered the realm of higher education governance and management on the assumption that much can be improved. If only institutions were to be better managed, many of the problems that now face higher education could substantially be reduced or even eliminated. At least, such is the atmosphere influencing many of the recent governmental and parliamentary papers and debates on higher education.

Given this increased attention, it is remarkable the degree to which the higher education research community has ignored issues of governance and management, particularly from a comparative perspec-

tive. Admittedly, the Northern American literature still emphasises notions of leadership, and the total quality management and continuous quality improvement movements also deal with issues of governance and management. British researchers have investigated the role and function of institutional top-management in the wake of the fundamental changes that have beset higher education in the United Kingdom. But for rigorous structural analysis of higher education decision-making, we remain reliant on the pioneering works of Baldridge (1971; 1978), Clark (1983), and Mintzberg (1979). In terms of comparative research, little attention has been given to the effects the changes over the last fifteen years have had on the currency of traditional concepts of academic organisation, such as the Continental, Anglo-Saxon and American governance models, with different loci of decision-making according to system type. Questions concerning to what extent decision-making processes still exhibit the characteristics of bureaucratic, collegial, political or garbage-can models remain to be answered. Has higher education managed to 'neutralise' much of the changes over the years through its internal decision-making processes and has it continued in much the same way as before, or have these changes affected the internal operations of the institutions?

In this article we present the first, preliminary findings of a comparative study commenced early in 1995 on governance structures and decision-making processes. Our primary objective in this study is to assess to what extent previous notions about governance, management and decision-making still hold true. A secondary objective is to investigate to what extent different forms of organisation and their ensuing decision-making processes result in different degrees of efficiency and effectiveness. As a first step in this ongoing research project - estimated to be a five year study - we distributed a questionnaire to top administrators in seven European countries. On the basis of an analysis of the results of this questionnaire, more detailed case studies will be performed for we are well aware that a survey is but an instrument to obtain a first glimpse of the intricacies and complexity of institutional governance and decision-making. For the present article, we examine our initial findings regarding decision-making in higher education institutions. Notwithstanding the limitations associated with the instrument and the fact that much of our initial analysis is basically descriptive in nature, we hope that these first results will make the reader sensitive to the differences that exist between countries and between different types of institutions. Only through an appreciation of both the complexity and variety in institutional governance structures can we improve our understanding of this important aspect of higher education.

Research design

In order to obtain empirical data a questionnaire was constructed, composed of three blocks of variables. In the last week of January 1995, this questionnaire was sent to the Rector (Vice-Chancellor, President) of 376 higher education institutions in Sweden, Denmark, the Federal Republic of Germany, France, the United Kingdom, the Netherlands and Flanders. It is assumed that these persons have a good overview and substantial knowledge and experience with respect to the governance structure of their institution and therefore can provide useful empirical data. From these 376, 123 institutions completed the questionnaire (only 112 in time to complete the analysis presented in

this article). This means a response rate of 33%, which, considering the specific group of respondents is not unsatisfactory. The main reasons for non-participation are (a) a lack of time or capacity, (b) ongoing reorganisation processes, and (c) in France, language difficulties where English seems to be a problem notwithstanding the positive responses we received. Table 1 presents the response rate by country.

Table 1: Response Rate

	Sent		Completed		Response
	Number	Perc.	Number (N2)	Perc.	
Sweden	23	6	7	6	30
Denmark	21	6	11	9	52
Germany	112	30	31	25	28
France	86	23	15	12	17
United Kingdom	74	20	33	27	45
Netherlands	41	11	21	17	51
Flanders	19	5	5	4	26
Total	376	100	123	100	33

The participating institutions differ in various ways. The oldest institution, for example, was founded in 1180, the most recent institutions were founded in 1992. More than 50% of the institutions were founded after the second world war. There also is a wide variety in the size of the participating institutions: from less than 1,000 students up to more than 40,000, and from less than 500 employees up to more than 5,000.

In addition to presenting the results of our survey for the total group, we compare institutions from different countries and we compare different kinds of institutions. The latter is done in two ways. First, we use the common classification of universities versus non-universities. In the total group there are 58 universities and 53 non-universities. Second, a distinction is made on the basis of the core business of the institution:

- Teaching institutions ('T-institutions'): teaching is the core business for more than 80% of the activities;
- Teaching and Research institutions ('TR-institutions'): teaching is the core business for 60 - 80% of the activities;
- Research institutions ('R-institutions'): teaching is the core business for less than 60% of the activities.

On the basis of this distinction there are 42 T-institutions, 22 TR-institutions and 43 R-institutions participating in this project. In the next section we will discuss the outcomes of the survey with respect to decision-making processes: which actors within the institution participate in decision-making; in what manner; and how can these decision-making processes be typified?

Involve ment of actors and the manner of participation

With respect to decision-making we have focused on six different policy issues, as a representative sample of the scope and nature of institutional decision-making. The issues are: the approval of new teaching programs, the design of research programs, the determination of budget priorities, the selection of key administrators, the selection of full professors, and the formation of long term institutional policies. As can be seen, these issues cover both primary (teaching and research) and secondary (support activities, financial management, etc) processes.

Per issue the respondents were asked to indicate to what extent actors within the institution participated in decision-making. For this purpose, the following actors were identified: administrators at the central and the decentralised levels, council-members at the central

and the decentralised levels, academics, and support staff. The word 'council' is used here as an ombudsman term defined as collective governance/decision-making bodies operating at either the central or decentralised level.

With respect to the *degree of participation*, the following modes were specified: (1) non-participation, (2) passive participation, and (3) active participation. Passive participation has been defined as the possibility for an actor to participate: eg., the actor can ask/demand certain information or can provide certain input (advise). Active participation implies that the actor participates by definition in the decision-making process. Of course, the fact that an actor participates actively in the decision-making process does not indicate to what extent this actor has actual influence or power. This question is not addressed in the present study.

With respect to the *manner of participation* the following possibilities were included in the questionnaire: (1) no voice, (2) right of information, (3) right to be heard, provide advice, (4) voting power, (5) shared responsibility for the decision taken. Although this scale does not allow for conclusions regarding the actual power or influence of an actor, it is implied that the 'stronger' forms of participation (4 and 5) increase the possibility for effective articulation of interest.

Before presenting the results per issue, a comprehensive overview of the degree of participation per actor is provided for the total population (see Table 2). This comprehensive degree of participation has been constructed by adding the scores on the six policy issues and recalculating them to a score on the interval <0-1>. Given the choice of issues, we believe this indicates reasonably well the involvement of the respective actors in institutional decision-making.

From Table 2 it can be concluded that academics are closely involved in institutional decision-making. In 80% of the institutions, academic participation is high. Next to the academics, central administrators, and to a lesser extent central council members appear to participate strongly in the decision-making process. Regarding the six policy issues (aggregated) we can conclude that the central level (both administrators and councils) is more strongly involved than the decentralised level. In particular, the decentralised administrators show a relatively low score. Although at the central level the administrators have a higher score than the councils, at the decentralised level the opposite seems to be the case. Administrative support staff are little involved in the decision-making process.

Table 2: Degree of participation in decision making per designated actor (frequencies)

	low	medium	high	mean
academics (N=91)	4	14	73	0.752
central administrators (N=93)	4	28	61	0.702
decentral administrators (N=90)	48	23	19	0.395
central councils (N=94)	10	29	55	0.665
decentral councils (N=94)	23	31	40	0.553
administrative support staff (N=94)	85	7	1	0.151

Scale from 0 to 1: 'low', 'medium' and 'high' refer respectively to the intervals <0.0 - .33>, <.33 - .67> en <.67 - 1.00>.

The more the mean approaches 1.00, the higher the degree of participation.

If we look at the degree of participation of the respective actors *per type of institution* some significant differences come to the fore. In universities, academics and central administrators participate more than in the non-universities as is evidenced by the mean-scores: respectively .82 and .74 for the universities versus .67 and .64 for the non-universities. For the T-TR-R-distinction, it appears that the different actors in the TR- and R-institutions do not differ substantially in terms of the degree of participation. However, within T-institutions

the academics, central and decentralised administrators, and members of the decentralised councils/collective decision-making bodies participate less in comparison to the other two types of institutions.

In Table 3 the overall degree of participation is broken down by country. Swedish institutions to a large extent appear to be in line with the outcomes presented in Table 2. Only the central councils appear to have a relatively low degree of participation. For the Danish institutions the most 'striking' conclusion next to the low scores for the academics and the central administrators appears to be the fact that the decentralised councils feature prominently in the decision-making process. Compared to the other countries the most noteworthy fact for the German institutions is the close involvement of the councils at both the central and the decentralised levels. In the French institutions administrative support staff assume a more prominent role compared to the other systems, although also in France the degree of participation for this group remains low. As an overall conclusion we note that the degree of participation of the various actors differs the most in the United Kingdom and the Netherlands compared to the other countries. Both British academics and the central level (administrators and councils) show a high degree of participation, while the decentralised levels appear less involved in decision-making. In the Netherlands the low scores for both academics and central councils are remarkable, while here we also find a comparatively high score for the decentralised administrators.

Table 3: Average degree of participation per country and actor

	S	DK	FRG	F	UK	NL
academics	0.77	0.65	0.79	0.79	0.8	0.61
central administrators	0.64	0.52	0.69	0.75	0.78	0.7
decentral administrators	0.39	0.33	0.33	0.47	0.34	0.62
central councils	0.36	0.63	0.8	0.7	0.7	0.5
decentral councils	0.57	0.71	0.65	0.54	0.43	0.56
administrative support staff	0.12	0.13	0.13	0.22	0.15	0.19

Scale from 0 to 1: 'low', 'medium' and 'high' refer respectively to the intervals <0.0 - .33>, <.33 - .67> en <.67 - 1.00>.

The more the mean approaches 1.00, the higher the degree of participation.

'bold' = @ <.10; '_____ = @ <.05

decision-making processes related to these activities are characterised by their decentralised nature.

Table 4: Degree and manner of participation of the designated actors with respect to the approval of a new teaching program (in percentages)*

	degree of participation			manner of participation				
	none	passive	active	1	2	3	4	5
administrators central level	19	38	43	9	10	46	16	19
administrators decentral level	31	42	28	15	22	39	13	12
academics	3	9	87	-	5	23	25	47
councils central level	10	34	54	5	9	15	40	31
councils decentral level	7	25	68	6	5	20	42	27
administrative support staff	63	30	6	47	31	14	5	2

* 1 = no voice; 2 = right of information; 3 = right to be heard/advise; 4 = a vote in reaching decisions; 5 = co-responsibility of reached decisions.

Table 5: Degree and manner of participation of the designated actors with respect to the design of research programs (in percentages)*

	degree of participation			manner of participation				
	none	passive	active	1	2	3	4	5
administrators central level	29	52	20	17	18	44	11	11
administrators decentral level	42	43	14	25	26	27	11	10
academics	1	6	93	1	3	13	21	62
councils central level	30	47	23	18	18	30	23	11
councils decentral level	24	40	36	13	14	26	26	21
administrative support staff	80	18	2	60	27	6	5	3

* 1 = no voice; 2 = right of information; 3 = right to be heard/advise; 4 = a vote in reaching decision; 5 = co-responsibility of reached decisions.

A different picture emerges when we look at the determination of budgetary priorities (Table 6). On this policy issue the central level appears dominant: 80% of the central administrators and 71% of the central councils actively participate in budgetary matters. Compared to decision-making with respect to primary processes (teaching and research), the low score of the academics stands out: 36% participate actively. Also with respect to this issue it is apparent that the more actors participate actively, the 'heavier' the manner of participation is (voting and co-responsibility).

Table 6: Degree and manner of participation of the designated actors with respect to determining budget priorities (in percentages)*

	degree of participation			manner of participation				
	none	passive	active	1	2	3	4	5
administrators central level	2	18	80	4	3	24	20	49
administrators decentral level	22	45	32	16	14	38	16	15
academics	22	43	36	12	16	31	21	21
councils central level	8	20	71	4	5	11	29	51
councils decentral level	19	37	43	12	8	28	29	22
administrative support staff	64	30	5	47	31	18		

The fourth and fifth policy issues are related to institutional personnel policy (Tables 7 and 8). A substantially different picture emerges with respect to the selection of administrators and professors. It appears as if in both cases 'self-selection' is the predominant mechanism: central administrators actively participate in the selection of new key administrators and academics portray the same behaviour with respect to the selection of new professors. In both cases there also is a (limited) role for the central councils. This form of self-selection opens the possibility for a certain type of co-ordination within the institution, namely standardisation on the basis of input (Mintzberg 1979). Administrators and academics have the opportunity to appoint those colleagues who fit in with the existing norms, values and capabilities. In this way a corps d'esprit can be created and maintained.

Table 7: Degree and manner of participation of the designated actors with respect to selecting key administrators (in percentages) *

	degree of participation			manner of participation				
	none	passive	active	1	2	3	4	5
administrators central level	6	13	81	6	5	16	21	52
administrators decentral level	55	30	15	39	19	23	13	6
academics	36	41	22	30	10	37	14	10
councils central level	33	23	43	21	13	22	24	21
council decentral level	64	24	13	49	20	16	8	7
administrative support staff	71	25	5	55	23	19	4	-

* 1 = no voice; 2 = right of information; 3 = right to be heard/advise; 4 = a vote in reaching decisions; 5 = co-responsibility of reached decisions

Table 8: Degree and manner of participation of the designated actors with respect to choosing full professors (in percentages) *

	degree of participation			manner of participation				
	none	passive	active	1	2	3	4	5
administrators central level	41	28	30	30	14	20	13	23
administrators decentral level	62	19	17	45	17	15	11	13
academics	8	13	77	7	6	15	28	43
councils central level	36	19	44	28	7	13	26	26
council decentral level	38	27	32	30	15	17	24	13
administrative support staff	89	10	1	80	16	3	1	-

* 1 = no voice; 2 = right of information; 3 = right to be heard/advise; 4 = a vote in reaching decisions; 5 = co-responsibility of reached decisions

The sixth issue is the formation of long-term institutional policy, e.g. development plans, strategic plans, institutional profiles, etcetera. The results are presented in Table 9. Although the role of the central administrators and central councils is paramount on this issue (81% and 78% active participation) the input of academics should not be underestimated (60% active participation).

Table 9: Degree and manner of participation of the designated actors with respect to formulating long term institutional policies (in percentages) *

	degree of participation			manner of participation				
	none	passive	active	1	2	3	4	5
administrators central level	4	14	81	4	5	21	23	46
administrators decentral level	28	44	28	19	21	35	16	10
academics	8	33	60	8	10	36	18	28
councils central level	2	19	78	1	2	10	33	54
council decentral level	11	50	38	8	12	45	25	10
administrative support staff	62	30	8	42	29	24	5	-

* 1 = no voice; 2 = right of information; 3 = right to be heard/advise; 4 = a vote in reaching decisions; 5 = co-responsibility of reached decisions

Table 10: Significant differences between actors in degree of participation per issue (means)

	University	non-university	T-institution	TR-institution	R-institution
approval of teaching program					
administrators central level	2.37	2.00			
academics	2.93	2.77	2.74	3	2.88
councils central level	2.59	2.27	2.31	2.64	2.43
councils decentral level			2.46	2.68	2.69
designating research programs					
academics			2.85	3	2.93
councils central level			1.91	2.18	1.79
determining budget priorities					
academics	2.33	1.96	1.9	2.15	2.35
councils decentral level			2.03	2.32	2.39
selecting key administrators					
academics	2.06	1.67	1.72	1.76	2.07
choosing full professors					
academics	2.85	2.57	2.51	2.9	2.78
councils decentral level	2.11	1.8	1.72	2.05	2.12
formulating long term policy					
administrators central level	2.93	2.6	2.61	2.9	2.85
academics	2.7	2.33	2.33	2.65	2.6
councils central level	2.85	2.67			

Scale: '1' (no participation), '2' (passive participation), and '3' (active participation).

Significant difference at least @ < .10

Characteristics of institutional decision-making

In addition to the degree and manner of participation in the decision-making processes, the study also focused on the characteristics of these processes with respect to the six policy issues. In order to determine the nature of decision-making, 21 variables were selected. The selection was based on the outcomes of earlier studies dealing with issues of governance and management in higher education studies.

In Table 11 the findings on the 21 variables are presented for the identified policy-issues. The figures presented are the average scores on a five-point scale. The respondents were asked the following question: 'to what degree is decision-making in your institution characterised by the following features?'. Our interpretation of the average scores is based on the following criteria:

- <1.00 - 1.80> variable is not characteristic for the decision-making process
- <1.80 - 2.60> variable is hardly characteristic
- <2.60 - 3.40> variable is fairly characteristic
- <3.40 - 4.20> variable is certainly characteristic
- <4.20 - 5.00> variable is highly characteristic

The first conclusion that can be drawn on the basis of Table 11 is that only a limited number of variables do not relate in any substantial way to the decision-making process: only 27 of the 126 scores are below the 2.60 mark. These variables are — for some of the issues — ad hoc decision-making, a large number of conflicts, informal decision-making and 'intuition instead of rational knowledge base'. Considering the value-connotations of these variables, we have to bear in mind that a certain response bias may exist; since our group of respondents is formed by top administrators. De-emphasising informality, intuition, conflicts and ad hoc actions would appear quite consistent with their background and experience; again, an issue requiring more detailed case-studies.

Our second conclusion with respect to Table 11 is that only a limited number of variables are highly characteristic of the decision-making processes: expertise and special knowledge feature clearly in deci-

sions on research programs and the selection of professors, also characterised by a very high degree of standardisation (especially in universities).

Other generalisations arising from Table 11 worth noting are:

- decision-making through negotiation appears to exist only to a limited extent; it is fairly characteristic in determining budgetary priorities;
 - a large feeling of mutual responsibility appears to exist, especially where long-term policy, the selection of professors and the approval of new teaching programs is concerned;
 - in the decision-making process, emphasis is placed on reaching mutual agreement and much consultation exists (except in the case of selecting administrators);
 - the design of research programs is characterised by decentralised decision-making;
 - in general, decision-making is based on expertise and special knowledge;
 - regarding budgetary priorities and the selection of administrators, decision-making is characterised by hierarchical relations, while this definitely is not the case for the design of research programs;
 - with respect to the approval of teaching programs, decision-making is standardised, as is the case for determining budgetary priorities, the selection of administrators and especially professors;
 - top-down decision-making is apparent in the case of setting budgetary priorities, the selection of administrators and the formation of long-term policy;
 - taking important decisions in higher education institutions is time-consuming, particularly with respect to the approval of teaching programs, the selection of professors and the formation of long-term policy.
- An analysis of differences for the various types of institutions with respect to the above characteristics reveals the following nuances. For universities, expertise and special knowledge are more characteristic for five of the six issues in comparison to non-universities. Regarding the approval of teaching programs, universities appear to be more characterised by standardised decision-making than non-universities and less by hierarchical relations, top-down and intuitive decision-making. Within universities, the decision-making processes regarding research programs are more decentralised, and competition and interest promotion are more characteristic of decision-making than is the case in non-universities. In universities, decision-making regarding budgetary priorities is more contentious. With respect to long-term policy, university decision-making is less characterised by hierarchical relations and personal characteristics, such as charisma.
- Between T-TR-R-institutions the following differences exist. T-institutions are:
- less characterised by (a) a large number of conflicts over budgetary priorities and the selection of professors, (b) emphasis on reaching consensus in the approval of teaching programs, (c) decentralised decision-making and competition in the design of research programs, (d) expertise and special knowledge for determining budgetary priorities, the selection of professors and the formation of long-term policy, (e) competition regarding the design of research programs, and (f) standardised decision-making with respect to the selection of professors; and
 - more characterised by (a) hierarchical relations with respect to the approval of teaching programs, budgetary priorities, the selection of administrators and the formation of long-term policy.

TR-institutions are:

- less characterised by (a) a feeling of mutual responsibility regarding the selection of administrators and the formation of long-term policy, (b) decentralised decision-making in the selection of administrators, (c) dispersed power in the selection of professors and the formation of long-term policy;
- more characterised by (a) a large number of conflicts with respect to approval of teaching programs and budget priorities, (b) emphasis on reaching consensus with respect to the selection of professors, (c) expertise and special knowledge as a basis for determining budget priorities in combination with fluid participation, (d) the promotion of interests in the design of research programs, and (e) personal characteristics in the selection of professors.

R-institutions are:

- less characterised by (a) hierarchical relations with respect to the approval of teaching programs, budget priorities, selection of administrators and the formation of long-term policy, (b) intuition in the selection of professors, and (c) top-down decision-making in the approval of new teaching programs;
- more characterised by (a) emphasis on consultation in the determination of budget priorities, (b) strong co-operation between the units in the design of research programs, (c) expertise and special knowledge as a basis for the selection of professors, in combination with standardised decision-making, which nevertheless is time-consuming, and (d) competition in the design of research programs.

Table 11: Features of decision making processes (means)

	teaching	research	budget	selecting administrators	choosing full professors	long term policy	
ad hoc decision making	2.38	3.11	2.04	2.09	2.02	2.36	
emphasis on bargaining	2.91	2.89	3.24	2.23	2.2	2.93	
sense of collective responsibility	3.81	3.32	3.47	3.31	3.73	3.95	
high number of conflicts	2.4	2.39	2.84	2.29	2.31	2.65	
emphasis on reaching consensus	4.04	3.7	3.48	3.37	3.84	3.99	
emphasis on consultation	3.74	3.43	3.32	3.14	3.69	3.94	
high cooperation between units	3.11	3.04	2.9	2.84	2.86	3.1	
decentralised decision making	3.4	3.85	2.99	2.41	2.94	2.83	
decision making based on expertise and special knowledge	3.95	4.44	3.71	3.69	4.39	3.96	
fluid participation	3.47	3.24	2.79	2.64	2.97	3.15	
decision making based on hierarchy	2.7	2.42	3.48	3.44	2.81	3.05	
informal decision making	2.85	3.24	2.14	2.17	2.31	2.71	
participation of diverse interest groups	3.34	3.13	2.86	2.76	2.82	3.37	
intuition instead of 'technical-rational' knowledge is dominant	2.5	2.41	2.22	2.88	2.47	2.6	
promoting particular interests	2.97	3.23	2.74	2.41	2.64	2.76	
decision making is based on personal characteristics	3.05	3.46	2.47	3.13	3.06	3.01	
dispersion of power throughout the institution	2.94	3.3	2.78	2.39	2.44	3.05	
rivalry within the institution	2.75	2.76	3.32	2.13	2.28	2.81	
standardisation of decision making	3.71	2.77	3.9	3.6	4.21	3.05	
top down decision making	2.57	2.36	4.02	3.99	3.05	3.61	
reaching important decisions does take a lot of time	3.73	3.38	3.33	3	3.57	3.92	

'bold' = significant difference between universities and non-universities;

'italic' = significant difference between T-, TR- of R-institutions

Scale: 1 = feature is found not at all; 5 = feature is found very much

Above, differences between types of institutions with respect to the separate policy issues, were identified. In Table 12 the differences in type of institutions are related to the overall score (average score of a characteristic for all six issues). We only present those scores for which significant differences exist between the types of institutions. There are substantial differences between universities and non-universities with respect to the following three decision-making characteristics:

- in universities the characteristics 'feeling of mutual responsibility' and 'expertise and special knowledge as a basis for decision-making' feature much more prominently than in non-universities; and
- non-universities are more characterised by hierarchical relationships than universities.

With respect to the T-TR-R distinction, we note that:

- TR-institutions are more characterised by ad hoc decision-making and a large number of conflicts, and less by mutual responsibility and shared power; and
- T-institutions are less characterised by expertise and special knowledge as a basis for decision-making and more by hierarchical relationships. It also is noteworthy that overall the T- and R-institutions show little differences.

Table 12: Significant differences of decision making features per type of institution (means)

	University	non-university	T-institution	TR-institution	R-institution	Total group
ad hoc decision making	2.24	2.66	2.34	2.35		
sense of collective responsibility	3.7	3.49	3.38	3.74	3.61	
high number of conflicts	2.34	2.83	2.46	2.49		
decision making based on expertise and special knowledge	4.16	3.85	3.82	4.17	4.12	4.02
decision making based on hierarchy	2.85	3.19	3.32	2.86	2.72	3.01
dispersion of power throughout the institution				2.55	2.93	2.79

Scale: 1 = feature is found not at all; 5 = feature is found very much.

Significant difference at least @ <.10

Finally, in Table 13 the average scores per country are presented. From this we can conclude that the British institutions differ the most from the total population. Also German and French institutions show a substantial number of differences. Decision-making in Dutch institutions compared to others is characterised by decentralisation, hierarchical relations, expertise and special knowledge, intuition and participation of various interest groups, with relatively little cooperation between units.

Conclusion

From the presentations of the survey results it is clear that substantial differences exist both between types of institutions as well as between countries. To a large extent, the results, particularly for the universities, reflect the continuing domination of professional expertise, especially where the primary processes of teaching and research are concerned. At the same time, also it is clear that the role of the central institutional administration is an important component in higher education governance and management, especially for what we can call the 'non-primary process' issues, such as financial management. With respect to differences between countries, the study shows substantial variation between the seven countries. This alone appears to provide sufficient basis to question the existence of the so-called continental model. On the European continent clearly different insti-

Table 13: Features of decision making processes of institutions of higher education per country (means)

	S	DK	FRG	F	UK	NL	Total
ad hoc decision making	1.64	2.75	2.42	2.58	2.26	2.38	2.35
emphasis on bargaining	2.81	1.24*	2.92	3.04	2.29	2.78	2.72
sense of collective responsibility	3.38	3.4	3.84	3.7	3.68	3.36	3.61
high number of conflicts	2.76	2.76	2.73	2.65	2.25	2.3	2.49
emphasis on reaching consensus	3.62	3.58	4.12	4.09	3.5	3.58	3.75
emphasis on consultation	3.52	3.75	3.73	3.79	3.4	3.35	3.55
much cooperation between units	2.88	2.88	3.15	2.87	3.18	2.64	2.98
decentralised decision making	3.36	3.44	3.22	2.84	2.71	3.42	3.09
decision making based on expertise and special knowledge	4.19	3.9	4.03	4.35	4.22	3.47	4.02
fluid participation	2.57	2.88	2.83	3.51	3.16	3.1	3.05
decision making based on hierarchy	2.86	2.78	2.72	3.67	2.8	3.36	3.01
informal decision making	2.17	2.3	3.02	2.1	2.28	2.8	2.55
participation of diverse interest groups	3.12	3.16	3.07	2.84	2.82	3.39	3.04
intuition instead of 'technical-rational' knowledge is dominant	2.36	2.18	2.44	2.59	2.46	3.06	2.52
promoting particular interests	2.14	1.22	2.79	2.64	2.81	2.91	2.79
decision making is based on personal characteristics	2.54	2.94	3.1	3.39	2.87	3.03	3.02
dispersion of power throughout the institution	3.19	2.85	3.08	2.3	2.71	2.79	2.79
rivalry within the institution	2.98	2.99	2.97	2.87	2.33	2.53	2.68
standardisation of decision making	3.62	3.46	3.44	4.06	3.5	3.61	3.56
top down decision making	2.95	3.18	2.24	3.75	1.58	3.15	3.28
reaching important decisions does take a lot of time	3.71	3.68	3.54	3.57	3.2	3.53	3.48

'bold' = significant difference @ <.10; * = significant difference @ <.05.

Scale: 1 = feature is found not at all; 5 = feature is found very much

tutional governance systems exist, and it would appear logical to relate these to the different ways in which national governments in these systems have changed their policies and policy-priorities over the years. However, to shed further light on these differences, a more detailed analysis of the data will have to be performed, relating for example the survey outcomes to differences in governmental steering paradigms.

References

- Baldridge, V. J. 1971, *Power and Conflict in the University*, New York, John Wiley.
 Baldridge, J.V. et al. 1978, *Policy Making and Effective Leadership*, San Francisco, Jossey Bass.
 Clark, Burton R. 1983, *The Higher Education System*, Berkeley, University of California Press.
 Goedegebure, L., Kaiser, F., Maassen, P., Meek, L., van Vught, F. and de Weert, Egbert 1994, *Higher Education Policy in International Perspective*, Oxford, Pergamon Press.
 Mintzberg, H. 1979, *The Structuring of Organisations*, Englewood Cliffs, N.J., Prentice Hall.
 Neave, G. and F.A. van Vught, F.A. eds. 1991, *Prometheus Bound*, Oxford, Pergamon Press.